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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,365	09/20/2004	Junichi Sato	P25867	4082

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GREENBLUM & BERNSTEIN, P.L.C.  
1950 ROLAND CLARKE PLACE  
RESTON, VA 20191

EXAMINER

BALAOING, ARIEL A

ART UNIT PAPER NUMBER

2683

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/507,365

Applicant(s)

SATO ET AL.

Examiner

Ariel Balaoing

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claim 1 is objected to because of the following informalities: On line 4 of Claim 1, the limitation "respectively of one ore more pieces". The limitation should read "respectively of one *or* more pieces". Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 15 is rejected under 35 U.S.C. 102(e) as being anticipated by HYMEL et al (US 2004/0068551 A1).

Regarding claim 15, HYMEL discloses an information acquiring method comprising (abstract): managing a content list storing one or more addresses respectively of one or more pieces of content to acquire (paragraph 33); detecting a communication section with channel quality that enables communication in a current position (paragraph 37, 38); determining at least one acquisition-scheduled content that is scheduled to acquire from among the content stored in the content list (paragraph 33-41); and acquiring the acquisition-scheduled content in the communication section that

enables communication using an address associated with the acquisition-scheduled content (paragraph 33, 40, 41).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1, 2, 4, 10, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over HYMEL et al (US 2004/0068551 A1) in view of WU et al (US 2002/0198963 A1).

Regarding claims 1, HYMEL discloses a terminal apparatus [wireless device] (102-Figure 1, 202-Figure 2) comprising: one or more wireless communication sections (paragraph 16; primary transceiver and secondary receiver); a channel quality detecting section, that detects channel quality [signal strength] of each of the wireless communication sections in a predetermined position (paragraph 27, 37, 38); a communication selecting section that selects at least one of the communication sections

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having channel quality that enables communication (paragraph 27, 37, 38), using the channel quality in a current position detected in the channel quality detecting section (paragraph 37, 38, 45). Although HYMEL discloses a content list managing section (106, 206-Figures 1 and 2) that manages a content list that stores one or more addresses respectively of one or more pieces of content to acquire (paragraph 20, 32, 33); an acquisition- content determining section that determines at least one acquisition-scheduled content that is scheduled to acquire from among the content stored in content list (paragraph 39, 40); and a content acquiring section that acquires the acquisition-scheduled content in the at least one of the communication sections selected (paragraph 39, 40), using an address associated with the acquisition-scheduled content (paragraph 20, 32), HYMEL does not disclose wherein a terminal apparatus comprises: a content list managing section that manages a content list that stores one or more addresses respectively of one or more pieces of content to acquire; an acquisition- content determining section that determines at least one acquisition-scheduled content that is scheduled to acquire from among the content stored in content list; and a content acquiring section that acquires the acquisition-scheduled content in the at least one of the communication sections selected, using an address associated with the acquisition-scheduled content. WU discloses wherein a terminal apparatus [wireless telephone] (abstract, paragraph 1, 46) comprises: a content list managing section that manages a content list that stores one or more addresses respectively of one or more pieces of content to acquire (paragraph 132, 140); an acquisition- content determining section that determines at least one acquisition-

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scheduled content that is scheduled to acquire from among the content stored in content list (paragraph 132, 140, 151); and a content acquiring section that acquires the acquisition-scheduled content in the at least one of the communication sections selected (paragraph 132, 140, 151), using an address associated with the acquisition-scheduled content (paragraph 132, 140, 151). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify HYMEL to include a content management systems within a mobile device, as taught by WU, as both systems relate to sending content to a device using a database. This is beneficial in that it allows the system of HYMEL to ability to download content at a specified time.

Regarding claim 2, see the rejection of the parent claim concerning the subject matter this claim is dependant upon. HYMEL further discloses further comprising: a position detecting section [GPS] that detects the current position (paragraph 18); and a communication area information managing section that manages communication area information on a communication-capable position of each of the wireless communication sections in a predetermined region (paragraph 37, 38), wherein based on the communication area information, the channel quality detecting section detects whether each of the wireless communication sections is able to communicate in the current position detected in the position detecting section (paragraph 37, 38; signal strength of each channel is detected and each station is accepted or rejected based on the detection).

Regarding claim 4, see the rejection of the parent claim concerning the subject matter this claim is dependant upon. HYMEL further discloses wherein the acquisition

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content determining section determines at least one of whether or not to acquire the acquisition-scheduled content and of the order in which the acquisition-scheduled content is acquired, based on an instruction input by a user (paragraph 29, 32, 33, 36, 40).

Regarding claim 10, see the rejection of the parent claim concerning the subject matter this claim is dependant upon. HYMEL further discloses wherein the channel quality detecting section detects the channel quality of each of the wireless communication sections by detecting stability of the each of the wireless communication sections (paragraph 27, 37, 38).

Regarding claim 11, see the rejection of the parent claim concerning the subject matter this claim is dependant upon. HYMEL further discloses wherein the channel quality detecting section detects the stability based on at least one of a wireless signal strength (paragraph 27, 37, 38), a ratio of wireless signal strength to noise, an error rate of transmission data, an effective transmission bandwidth, and a variation with time in each of the wireless signal strength, the ratio of wireless signal strength to noise, the error rate of transmission data, and the effective transmission bandwidth.

Regarding claim 13, see the rejection of the parent claim concerning the subject matter this claim is dependant upon. HYMEL further discloses wherein the acquisition content determining section determines the number of pieces of acquisition-scheduled content based on the channel quality of each of the wireless communication sections detected in the channel quality detecting section (paragraph 36-38; the number of

channels to acquire content from are determined by the measured signal strength of each channel).

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over HYMEL et al (US 2004/0068551 A1) in view of WU et al (US 2002/0198963 A1) as applied to claim 1 above, and further in view of TANAKA et al (US 6,122,486).

Regarding claim 3, see the rejections of the parent claim concerning the subject matter this claim is dependant upon. However, the combination of HYMEL and WU do not disclose wherein the terminal apparatus performs control for decreasing a processing capability of each of the wireless communication sections that is unable to communicate. TANAKA discloses wherein the terminal apparatus performs control for decreasing a processing capability of each of the wireless communication sections that is unable to communicate (column 3:line 34-column 4:line 24; when mobile enters a communication restricted site, the mobile is powered down thereby eliminating processing power to the communication apparatus). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of HYMEL and WU to include a control for reducing processing when communication is unavailable, as taught by TANAKA as both systems relate to transmission control of wireless devices. This is beneficial in that it allows the combination of HYMEL and WU to cease communication in a restricted area.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over HYMEL et al (US 2004/0068551 A1) in view of WU et al (US 2002/0198963 A1) as applied to claim 1 above, and further in view of PERKES et al (US 2002/0069132 A1).



Regarding claim 5, see the rejections of the parent claim concerning the subject matter this claim is dependant upon. However, the combination of HYMEL in view of WU does not disclose wherein the content list describes priorities associates with the addresses of the content, and based on the priorities, the acquisition content determining section determines at least one of whether or not to acquire the acquisition-scheduled content and of the order in which the acquisition-scheduled content is acquired. PERKES discloses wherein the content list [content links] describes priorities associates with the addresses of the content (paragraph 39, 43, 50; priority of acquisition is based on the size of the file based on the address), and based on the priorities, the acquisition content determining section determines at least one of whether or not to acquire the acquisition-scheduled content and of the order in which the acquisition-scheduled content is acquired (paragraph 16, 43, 50). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of HYMEL and WU to include a means for assigning a priority associated to an address, as taught by PERKES, since both systems relate to the transmission and reception of various content. This is beneficial in that allows the system of HYMEL and WU to determine if file downloads are too large for the mobile device.

9. Claims 6 and 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over HYMEL et al (US 2004/0068551 A1) in view of WU et al (US 2002/0198963 A1) as applied to claims 1 and 2 above, and further in view of PENG (US 2001/004099 A1).

Regarding claim 6, see the rejection of the parent claim concerning the subject matter this claim is dependant upon. However, the combination of HYMEL and WU does not disclose wherein the content list describes position information of inside of a predetermined region associated with an address of content, and based on the position information, the acquisition content determining section determines at least one of whether or not to acquire the acquisition-scheduled content and of the order in which the acquisition-scheduled content is acquired. PENG discloses wherein the content list describes position information [location] of inside of a predetermined region associated with an address of content (paragraph 9-12), and based on the position information, the acquisition content determining section determines at least one of whether or not to acquire the acquisition-scheduled content and of the order in which the acquisition-scheduled content is acquired (paragraph 9-12). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of HYMEL and WU to include a means for determining a location of a file, as taught by PENG, as both systems relate to the optimization of data acquisition. This is beneficial in that download latency of files located closer to the mobile device is much smaller then those located farther away.

Regarding claim 7, see the rejection of the parent claim concerning the subject matter this claim is dependant upon. However, the combination of HYMEL and WU does not disclose wherein based on the communication area information, the acquisition content determining section judges whether communication is allowed in a position of the position information in the predetermined region described in the content

list, and thereby determines at least one of whether or not to acquire content in response to the position information inside the predetermined region and of the order in which the content is acquired. PENG discloses wherein based on the communication area information [reference header], the acquisition content determining section judges whether communication is allowed in a position of the position information in the predetermined region described in the content list, and thereby determines at least one of whether or not to acquire content in response to the position information inside the predetermined region and of the order in which the content is acquired (paragraphs 9-12; the local cache is scanned for a file and an address determination is made on where the file can be found and acquired). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of HYMEL and WU to include a means for determining a location of a file, as taught by PENG, as both systems relate to the optimization of data acquisition. This is beneficial in that download latency of files located closer to the mobile device is much smaller than those located farther away.

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over HYMEL et al (US 2004/0068551 A1) in view of WU et al (US 2002/0198963 A1), and further in view of PENG (US 2001/004099 A1) as applied to claim 6 above, and further in view of SPAUR et al (US 6,122,514).

Regarding claim 8, see the rejections of the parent claim concerning the subject matter this claim is dependant upon. However, the combination of HYMEL, WU and

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PENG do not disclose wherein based on at least one of a moving direction and moving speed of the terminal apparatus, the acquisition content determining section determines at least one of whether or not to acquire content and of the order in which the content is acquired. SPAUR discloses wherein based on at least one of a moving direction and moving speed of the terminal apparatus, the acquisition content determining section determines at least one of whether or not to acquire content and of the order in which the content is acquired (column 12:lines 42-67; velocity information is obtained to determine whether a channel switch is necessary before acquiring the content).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of HYMEL, WU and PENG to include a velocity determining means, as taught by SPAUR, since both systems have position capturing capabilities that determine signal acquisition. This is beneficial in that content acquisition can be paused if it is determined that the mobile will move out of communication range of a selected server.

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over HYMEL et al (US 2004/0068551 A1) in view of WU et al (US 2002/0198963 A1) as applied to claim 1 above, and further in view of HARDIN (US 6,400,948 B1).

Regarding claim 9, see the rejections of the parent claim concerning the subject matter this claim is dependant upon. However, the combination of HYMEL and WU does not disclose wherein the content list describes reference history information associated with the addresses of content, and based on the reference history information, the acquisition content determining section determines at least one of

whether or not to acquire the content and-of the order in which the content is acquired.

HARDIN discloses wherein the content list describes reference history information associated with the addresses of content, and based on the reference history information, the acquisition content determining section determines at least one of whether or not to acquire the content and-of the order in which the content is acquired (column 9:lines 53-65; column 13:lines 28-41; a history list stored in the mobile device is used to determine a reliable data channel). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of HYMEL and WU to include a history of data channels, as taught by HARDIN, since both systems relate to testing and locating communication channels. This is beneficial in that it allows the combination of HYMEL and WU to more efficiently acquire content from known data channels.

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over HYMEL et al (US 2004/0068551 A1) in view of WU et al (US 2002/0198963 A1) as applied to claim 1 above, and further in view of BYRNE (US 5,533,099).

Regarding claim 12, see the rejections of the parent claim concerning the subject matter this claim is dependant upon. However, the combination of HYMEL and WU does not disclose wherein the channel quality detecting section detects the channel quality of each of the wireless communication sections by detecting security that enables the each of the wireless communication sections to communicate without tapping. BYRNE discloses wherein the channel quality detecting section detects the channel quality of each of the wireless communication sections by detecting security

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that enables the each of the wireless communication sections to communicate without tapping (column 4:lines 26-49; signal strength and security protocols are determined by the microprocessor CCT). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of HYMEL and WU to include a security detection means, as taught by BYRNE, since both systems relate to measuring signals from a remote site. This is beneficial in that it allows the combination of HYMEL and WU the ability to change protocols when a secured site is detected.

***Allowable Subject Matter***

13. Claim 14 is allowed.

***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

CHINOMI et al (US 2004/0077362 A1) – Mobile body information system

SWART et al (US 2003/00290 A1) – Multimedia delivery and acquisition system

MEADE, II et al (US 2002/0184304 A1) – Wireless networked peripheral devices

LEVINE et al (US 2002/0073199 A1) – Method for extending a network map

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ariel Balaoing whose telephone number is (571) 272-7317. The examiner can normally be reached on Monday-Friday from 8:00 AM to 4:30 AM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
RAFAEL PEREZ-GUTIERREZ

PATENT EXAMINER

6/25/05

Ariel Balaoing  
Patent Examiner  
Art Unit 2683

AB